

# REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 CFR 1.14(e)

In re Application of

Campbell

Application Number

09/371.776

Filed

8/10/99

Art Unit

Examiner

Paper No. \_\_\_\_\_

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United States Patent Application Publication No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_,

United States Patent Number 6412811, column \_\_\_\_\_, line \_\_\_\_\_, or

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- ☐ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or

1.14(e)(2)(i), i.e., Application No. \_\_\_\_\_, paper No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

2. ☐ I hereby request access under 37 CFR 1.14(e)(1) to an application in which the applicant has filed an authorization to lay open the complete application to the public.

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(12) **United States Patent**  
**Campbell et al.**

(10) **Patent No.: US 6,412,811 B1**  
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(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

3,773,351 A \* 11/1973 Catanzarite ..... 280/738  
5,573,271 A 11/1996 Headley  
5,603,525 A 2/1997 Zakula  
5,709,406 A \* 1/1998 Buchanan ..... 280/737  
5,794,973 A \* 8/1998 O'Loughlin et al. .... 280/737  
5,967,550 A \* 10/1999 Shirk et al. .... 280/736  
6,010,152 A \* 1/2000 Swann et al. .... 280/736  
6,010,153 A 1/2000 Halas et al.  
6,029,995 A 2/2000 Fink  
6,056,316 A \* 5/2000 Yamaji et al. .... 280/730.2  
6,062,599 A 5/2000 Forbes et al.  
6,145,876 A \* 11/2000 Hamilton et al. .... 280/737

#### FOREIGN PATENT DOCUMENTS

|    |          |         |
|----|----------|---------|
| GB | 2314300  | 12/1997 |
| JP | 10157551 | 6/1998  |
| JP | 10230814 | 9/1998  |

\* cited by examiner

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#### Related U.S. Application Data

(63) Continuation-in-part of application No. 09/259,362, filed on Feb. 26, 1999, now Pat. No. 6,227,562, and a continuation-in-part of application No. 09/371,776, filed on Aug. 10, 1999.

(51) **Int. Cl.<sup>7</sup>** ..... B60R 21/22; B60R 21/26

(52) **U.S. Cl.** ..... 280/730.2; 280/737; 137/68.13; 137/71

(58) **Field of Search** ..... 280/737, 736, 280/741, 730.2; 137/68.13, 71

(56) **References Cited**

#### U.S. PATENT DOCUMENTS

3,680,886 A \* 8/1972 Mazelsky ..... 280/740

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(57) **ABSTRACT**

An apparatus (10) for helping to protect an occupant of a vehicle (12) that has a side structure (16) includes an inflatable vehicle occupant protection device (14). The inflatable vehicle occupant protection device (14) is inflatable into a position between the side structure of the vehicle and a vehicle occupant. The apparatus (10) includes an inflator (22) for inflating the inflatable vehicle occupant protection device (14) and for maintaining the inflatable vehicle occupant protection device in an inflated condition for at least five seconds. The inflator (22) contains a stored inflation fluid under pressure. The inflation fluid consists essentially of helium.

**23 Claims, 6 Drawing Sheets**

